

LEVANOVSKIY, L.B., kand. tekhn. nauk; KRAVTSOV, G.Ya., red.

[Irrigation and water supply of lands in the U.S.S.R.]
Oroshenie i obvodnenie zemel' v SSSR. Moskva, Kolos,
1964. 317 p. (MIRA 18:3)

PETROSYAN, Yu.S.; LEVANT, A.D.

Cardiac catheterization in tricuspid valve stenosis. Grud.
khir. 2 no.2:36-42 Mr-Apr'60. (MIRA 16:7)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir.-prof. A.A.
Busalov, nauchnyy rukovoditel' - akad. A.N.Bakulev). Adres
avtorov: Moskva, Leninskiy prosp. d.8, Institut grudnoy
khirurgii AMN SSSR.

(CARDIAC CATHETERIZATION) (HEART--VALVES)

PETROSYAN, Yu.S.; LEVANT, A.D.

Role of angiocardiology in the diagnosis of tricuspid stenosis.
Vest.rent.1 rad. 36 no.3:10-13 My-Je '61. (MIRA 14:7)

1. Iz rentgenovskogo otdeleniya (zav. - dotsent M.A.Ivanitskaya) i
otdeleniya zabolevaniy serdtza i sosudov u vzroslykh (zav. - prof.
S.A.Kolesnikov) Instituta grudnoy khirurgii AMN SSSR (dir. - prof.
Adres avtora: Moskva, V-49, Leninskiy pr., 8, Institut grudnoy
khirurgii (for Petrosyan).

(HEART--VALVES--DISEASES)

(ANGIOCARDIOGRAPHY)

KOLESNIKOV, S.A., prof.; LEVANT, A.D.

Surgical treatment of tricuspid stenosis. Kardiologia 1 no.3:
51-58 My-Je '61. (MIRA 15:3)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir. - prof.
S.A. Kolesnikov; nauchnyy rukovoditel' - akademik A.N. Bakulev).
(HEART VALVES—SURGERY)

SERGEYEV, V.M.; LEVANT, A.D.

New developments in chest surgery. Vest.AMN SSSR 16 no.3:71-77
'61. (MIRA 14:7)

(CHEST--SURGERY)

LEVANT, A. D.

Surgical treatment of tricuspid stenosis (Review of the literature).
Grud. khir. no.4:114-117 '61. (MIRA 14:12)

1. Iz Instituta grudnoy khirurgii (dir. - prof. S. A. Kolesnikov,
nauchnyy rukovitel' - akad. A. N. Bakulev) AMN SSSR.

(HEART--VALVES--DISEASES)

KOLESNIKOV, S.A., professor; TSUKERMAN, G.I.; PETROSYAN, Yu.S.; LEVANT,
A.D.

Surgical treatment of mitral, aortic and tricuspid stenosis.
Vest.khir. no.5:3-10 '61. (MIRA 15:1)

1. Iz Instituta grudnoy khirurgii (dir. - prof. S.A. Kolesnikov,
nauchn. rukovod. - akademik A.N. Bakulev) AMN SSSR. Adres avtorov:
Moskva, B-49, Leninskiy pr., d.8, Institut grudnoy khirurgii.
(AORTA--DISEASES) (MITRAL VALVE--DISEASES)
(HEART--VALVES--DISEASES)

KOLESNIKOV, S.A.; GENIN, N.M.; LEVANT, A.D.; PETROSYAN, Yu.S.

Surgical treatment of tricuspid stenosis. Grud. khir. 1 no.5:16-23
S-O '61. (MIRA 15:3)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir. - prof.
A.A. Busalov nauchnyy rukovoditel' - akademik A.N. Bakulev).
Adres avtorov: Moskva, Leninskiy prosp., d.8, Institut grudnoy
khirurgii AMN SSSR.

(HEART—VALVES)

LEVANT, A.D., PETROSYAN, Yu.S. (Moskva)

Jugular phlebography in patients with tricuspid stenosis. Klin.
med. no.7:106-110 '61. (MIRA 14:8)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S.A.
Kolesnikov, nauchnyy rukovoditel' - akad. A.N. Bakulev).
(HEART--VALVES--DISEASES) (ANGIOGRAPHY)

GALUSHKO, Yu. A.; LEVANT, A. D.; ANANIYAN, P. P.

Surgical treatment of tricuspid insufficiency; survey of the literature. Grud. khir. 4 no.1:121-126 Ja-F '62.

(MIRA 15:2)

1. Iz Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S. A. Kolesnikov, nauchnyy rukovoditel' - akad. A. N. Bakulev)

(HEART—VALVES—DISEASES)

GENIN, N.M., kand.med.nauk; LAPKIN, K.V.; LEVANT, A.D.

Single-stage surgical removal of mitral, aortic and tricuspid stenoses using the left approach. Vest.khir. no.1:134-136 '62.

(MIRA 15:1)

1. Iz Instituta grudnoy khirurgii (dir. - prof. S.A. Kolesnikov, nauchn. rukovod. - prof. A.N. Bakulev) AN SSSR. Adres avtorov: Moskva, ~~Lebelskiy pr.~~, d.8, Institut grudnoy khirurgii AN SSSR.
(HEART--VALVES--SURGERY) -- (AORTA--SURGERY)
(TRICUSPID VALVE)

KOLESNIKOV, S.A.; TSUKERMAN, G.I.; LEVANT, A.D.; LAPKIN, K.V.

Methods of tricuspid commissurotomy. Grudn. khir. 4. no.5:6-11
S-0*62 (MIRA 17:3)

1. Iz otdeleniya priobretennykh porokov serdtsa (zav. - prof. S.A. Kolesnikov) Instituta serdechno-sosudistoy khirurgii (dir. prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR. Adres avtorov: Moskva, V-49, Leninskiy prospekt, d.8, Institut serdechno-sosudistoy khirurgii AMN SSSR.

ZOLNIKOV, S. M.; LEVANT, A. D. (Moscow)

"L'insuffisance respiratoire aigue chez les malades operes sur le coeur et les gros vaisseau."

report submitted for 13th French Cong on Anesthesiology, Bordeaux, 31 May-3 Jun 63.

LEVANT, Aleksandr Davidovich; GEMIN, L.L., red.

[Clinical aspects, diagnosis and surgical treatment of
tricuspid stenosis] Klinika, diagnostika i khirurgiches-
skoe lechenie trikuspidal'nogo stenoza. Moskva, Meditsina,
1964. 154 p. (MIRA 17:7)

TSUKERMAN, G.I.; LEVINT, A.O.; KYO, E.P. (Moskva)

Case of successful surgical treatment of acute intestinal obstruction in thromboembolism of the mesenteric vessels in a patient on the third day after mitral commissurotomy. Grud. khir. 5 no.5:89-90 S-0 '63. (M.R. 17:8)

1. Adres avtorov: Moskva V-49, Leninsky prospekt, d.3, Institut nerdechno-sosudistoy khirurgii.

TSUKERMAN, G.I.; PETROSYAN, Yu.S.; LEVANT, A.D.; DANIYELIAN, L.A.;
KOSTYUCHENOK, B.M.; TSYB, A.F.; KISIS, S.Ya.; GOLIKOV, G.T.;
POKROVSKIY, A.V.; BURAKOVSKIY, V.I.; KONSTANTINOV, E.A.;
LYUDE, M.N.; GOLONZKO, R.R.

Proceedings of the meetings of the Surgical Society of Moscow
and Moscow region. Grud. khir. 6 no.6:114-117 N-D 1984.
(MIRA 18:7)

1. Institut serdechno-sosudistoy khirurgii AMN SSSR (for all
except Kostyuchenok, Tsyb). 2. Institut khirurgii imeni A.V.
Vishnevskogo AMN SSSR (for Kostyuchenok, Tsyb).

MEYTINA, R.A.; LEVANT, A.D.; DANIELYAN, L.A.

Respiratory changes in tricuspid stenosis. Zhur. eksp. i klin.
med. 5 no.2:39-47 '65. (MIRA 19:1)

LEVANT, D. YE.

"Priority of Our Country's Urology," Sov. Zdrav., No. 3, 1948.

Docent, Urological Clinic, 2nd Moscow State Med. Inst. Im. I. V. Stalin, -~~1948~~-.

LEVANT, D. Ye.

~~Priority of Russian surgeons and urologists in development~~
of the theory of stenosis of the male urethra. Kirurgiya,
Moskva no.7:59-62 July 1951. (CML 21:1)

1. Docent. 2. Of the Urological Clinic (Director -- Prof.
A. B. Topchan), Second Moscow Medical Institute imeni I. V.
Stalin.

LEVANT, D.Ye., dotsent (Moscow)

Results of the enlarged plenum of the administration of the All-
Union Society of Urologists held on July 5-7, 1954. Urologia
no.1:85-91 Ja-Mr '55. (MLRA 8:10)

(UROLOGY--SOCIETIES)

LEVANT, D.Ye., dotsent (Moskva)

"Methods for examining patients with urological diseases." A.I.
Mikhel'son. Reviewed by D.M.Levant. Urologiia 21 no.1:83-84 Ja-Mr '56.
(GENITOURINARY ORGANS--DISEASES) (MLRA 9:12)
(MIKHELSON, A.I.)

LEVANT, D.Ye., dotsent; GURVICH, I.A., kandidat meditsinskikh nauk

Errors in diagnosis of calculi in the ureters. Urologia 21 no.4:
37-43 O-D '56. (MLRA 10:2)

1. Iz urologicheskogo otdeleniya Gorodskoy klinicheskoy bol'nitsy
No.1 imeni N.I.Pirogova (glavnyy vrach- zasluzhennyy vrach RSFSR
L.D.Chernyshev)

(KIDNEYS, calculi
differ. diag.)

(UTERERS, calculi
differ. diag.)

LEVANT, D.Ye., dotsent (Moskva)

"Outlines of urological semeiotics and diagnosis" by S.D. Goligorskii.
Reviewed by D.E. Levant. Urologiia, 22 no.1:79-81 Ja-F '57
(MLRA 10:5)

(URINARY ORGANS--DISEASES)

TOPCHAN, A.B., professor; LEVANT, D.Ye., dotsent

Report on the work of the administration of the All-Union Society
of Urologists in 1951-1956. Urologia 22 no.3:73-76 My-Je '57.
(MLRA 10:8)

1. Predsedatel' pravleniya Vsesoyuznogo obshchestva urologov
(for Topchan). 2. Sekretar' pravleniya Vsesoyuznogo obshchestva
urologov (for Levant) .
(GENITOURINARY ORGANS--DISEASES)

LEVANT, D.Ye., dotsent

Late results of the surgical treatment of ectopy of the urinary bladder. Urologia 22 no.6:67-68 N-D '57. (MIRA 11:2)

1. Iz urologicheskogo otdeleniya (nauchnyy rukovoditel' - prof. A.Ya.Pytel'; zav. - dotsent D.Ye.Levant) Gorodskoy klinicheskoy bol'nitsy No.1 imeni N.I.Pirogova (glavnyy vrach - saaluzhennyy vrach RSPSR L.D.Chernyshev)

(BLADDER, abnorm.

ectopy, surg., remote results)

LEVANT, D.Ye., dots. (Moskva)

"Cystitis" by S.D. Goligorskii. Reviewed by D.E. Levant.
Urologiya 23 no.4:82-84 J1-Ag '58 (MIRA 11:8)
(BLADDER--DISEASES)
(GOLIGORSKIY, S.D.)

LEVANT, D.Ye., dots (Moskva)

Third All-Union Conference of Urologists. Urologiya 23 no.5:75-79
S-O '58 (MIRA 11:11)
(UROLOGY--CONGRESSES)

TOPCHAN, A.B., prof.red.(Moskva),[deceased]; PORUDOMINSKIY, I.M.,
prof.,red.(moskva); PYTEL', A.Ya., prof., red.(moskva);
EPSHTEYN, I.M., prof., red. (Moskva); LEVANT, D.Ye., dotsent, red.
(Moskva); FRUMKIN, A.P., prof. zasluzhennyy deyatel' nauki, zam.
red. (Moskva); GABERLAND, M.I., tekhn. red.

[Transactions of the Third All-Union Conference of Urologists]
Trudy Vsesoyuznoy konferentsii urologov, 3d, Tiflis, 1958.
Moskva, Gos.izd-vo med. lit-ry Medgiz, 1960. 259 p.

(MIRA 14:5)

1. Vsesoyuznaya konferentsiya urologov, 3d, Tiflis, 1958.
2. Predsedatel' pravleniya Vsesoyuznogo obshchestva urologov
(for Topchan).

(UROLOGY--CONGRESSES)

YEVSEYENKO, Lyudmila Sergeyevna; LEVANT, D.Ye., red.; BUL'DYAYEV,
N.A., tekhn. red.

[Changes in the urinary system in cancer of the cervix uteri]
Izmeneniia v mochevoi sisteme pri rako sheiki matki. Moskva,
Medgiz, 1961. 162 p. (MIRA 15:7)
(UTERUS—CANCER) (URINARY ORGANS—DISEASES)

KASATKIN, Mikhail Romanovich, kand. med.nauk; LEVANT, D.Ye.,
red.; BALDINA, N.F., tekhn. red.

[Urological aid in lesions of the spinal cord] Urologicheskaia pomoshch' pri travme spinnogo mozga. Moskva, Medgiz, 1963. 101 p. (MIRA 16:12)
(SPINAL CORD--WOUNDS AND INJURIES) (UROLOGY)

TRAPEZNIKOVA, Margarita Fedorovna; LEVANT, D.Ye., red.; CHULKOV,
I.F., tekhn. red.

[Tumors of the testicle] Opukholi iaichka. Moskva,
Medgiz, 1963. 131 p. (MIRA 16:7)
(TESTICLE--CANCER)

SABEL'NIKOV, Ivan Ivanovich; LEVANT, D.Ye., red.; BUKOVSKAYA,
N.A., tekhn. red.

[Hypertrophy of the prostate gland] Gipertrofiia pred-
statel'noi zhelezy. Moskva, Medgiz, 1963. 215 p.
(MIRA 16:12)

(PROSTATE GLAND—DISEASES)
(HYPERTROPHY)

FRUMKIN, A. P., zasl. deyatel' nauki prof, red. [deceased]; PYTEL', A. Ya., prof., zam. red.; VOROBTSOV, V. I., kand med. nauk, red.; GOL'DIN, G. I., doktor med. nauk, red.; LEVANT, D. Ye., dots., red.; PORUDOMINSKIY, I. M., prof., red.; EPSHTEYN, I. M. prof., red.; LEVANT, D. Ye., red.; BEL'CHIKOVA, Yu. S., tekhn. red.

[Transactions of the Fourth All-Union Conference of Urologists, Moscow, June 24-30, 1961] Trudy Vsesoiuznoi konferentsii urologov. 4th, Moscow, 1961. Moskva, Medgiz, 1963. 238 p.
(MIRA 17:3)

1. Vsesoyuznaya konferentsiya urologov. 4th, Moscow, 1961.

LEVANT, G.: PRISYAZHNYUK, A.

The Spartakiada strides. Voen. zhuk. 40 no. 10. 38-39
O '64. (MORA 17 12)

1. Nachal'nik otдела morskoy podgotovki Respublikanskogo komiteta Dobrovol'nogo obshchestva soдейstviya armii, aviatsii i flotu UkrSSR (for Levant). 2. Nachal'nik spasatel'noy sluzhby Respublikanskogo komiteta Dobrovol'nogo obshchestva soдейstviya armii, aviatsii i flotu UkrSSR (for Prisyazhnyuk).

LEVANT, O., kapitan 2 ranga.

Multiple skiff races. Voen.znanjl no.7:27 J1'55. (MLRA 8:12)
(Boats and boating)

LEVANT, G.

Born through the creativity of an activist group. Voen. znan.
39 no.4:29-30 Ap '63. (MIRA 16:6)

1. Nachal'nik otdela morskoy podgotovki respublikanskogo
komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii
i flotu UkrSSR.

(Ukraine---Ship models)

MASHEVICH, Z.A.; LEVANT, G.V., kand. tekhn. nauk, retsenent;
KHOLIN, V.A., inzh., retsenent; IZAKOV, N.R., kand.
tekhn. nauk, red.

[Methodology for teaching the course "Metal cutting"
in mechanical engineering schools] Metodika prepodava-
niia kursa "Rezanie metallov" v mashinostroitel'nykh
tekhnikumakh. Moskva, Mashinostroenie 1964. 107 p.
(MIRA 17:8)

LEVANT, G.V., kand. tekhn. nauk; KASABOV, Sh.M., inzh., red.

[Laboratory work in training shops for the working of metals by cutting; manual for students of the physics department] Praktikum v uchebnykh masterskikh po obrabotke metallov rezaniem; uchebnoe posobie dlia studentov fizicheskogo fakul'teta. Moskva, Mosk. gos. pedagog. in-t, 1964. 85 p. (MIRA 17:12)

157 AND 158 COPIES

PROCESSING AND PREPARATION

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CR

Colorimetric determination of sulfur dyes. (J. E. Levant and R. I. Nemtsova. *J. Applied Chem. (U. S. S. R.)* 6, 540-51(1953).—The dye to be tested and a standard are oxidized with H_2O_2 and compared in a colorimeter. A. A. Prokhinok

450-35A METALLURGICAL LITERATURE CLASSIFICATION

FROM 517 517A

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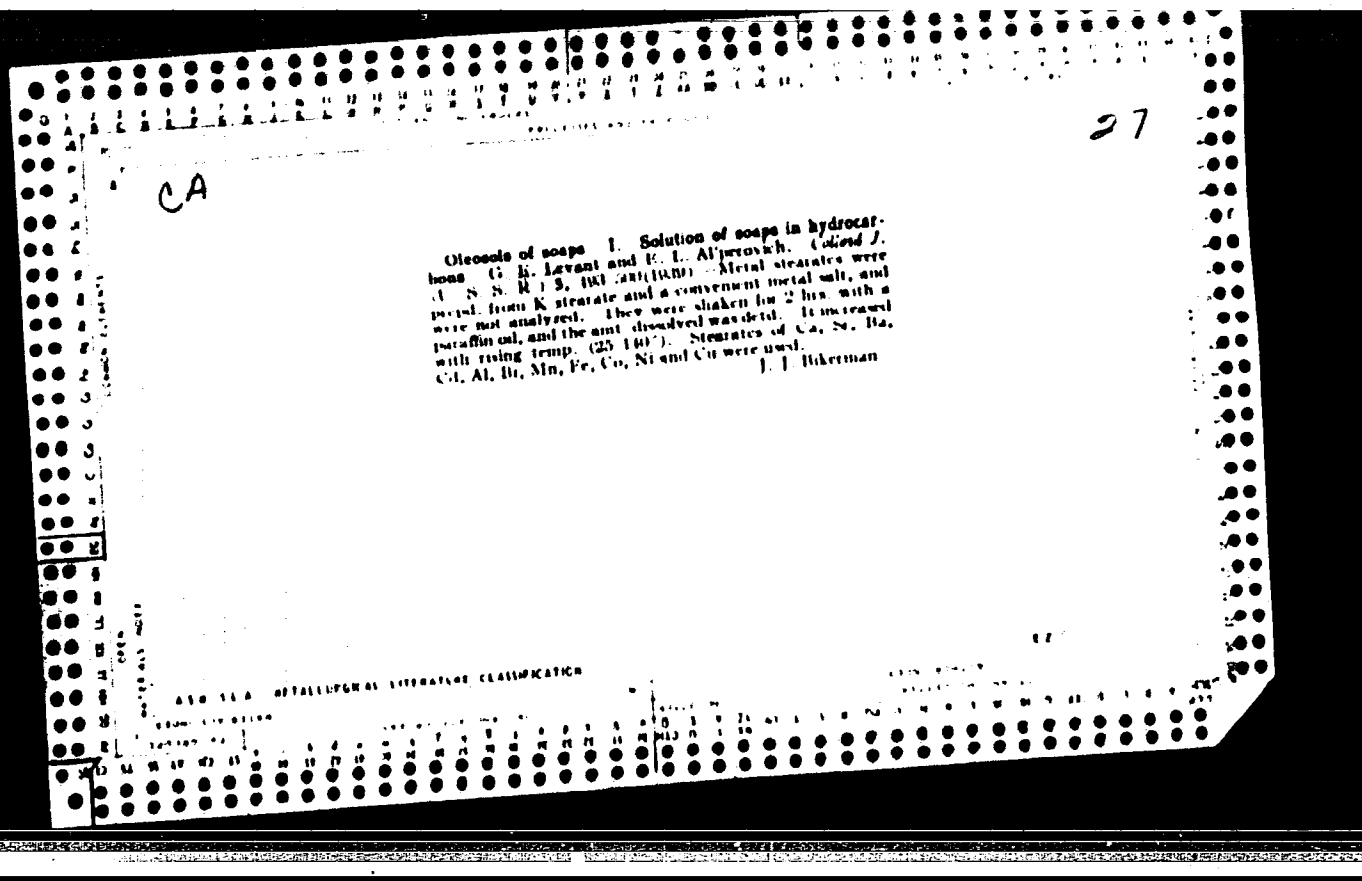
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LEVANT, G.Ye. (Moscow).

On several basic concepts in chemistry. Khim.v shkole no.5:70-74 S-0 '53.
(MLA 6:9)
(Chemistry--Study and teaching)

5 (4)

AUTHORS:

Balezin, S. A., Beskov, S. D., SOV/76-32-12-32/32
Levant, G. Ye., Putilova, I. N., Figurovskiy, N. A.

TITLE:

L. I. Kashtanov (Obituary) - (L. I. Kashtanov (Nekrolog))

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 12,
 pp 2848 - 2849 (USSR)

ABSTRACT:

The deceased, who died on August 18, 1958, was born in Moscow on November 25, 1902. Between 1920 and 1924 he studied at the Moscow State University. While a student, he worked at the Byuro redkikh elementov (Bureau of Rare Elements) where he devoted his studies to titanium, tantalum, molybdenum, tungsten, and uranium. Between 1924 and 1928 he worked in industry (Elektroglia plant (electrode carbon plant) and Moskovskiy kabel'nyy zavod (Moscow Cable Plant)). From 1928 till 1938 he taught at the Moskovskiy torfyanoy institut (Moscow Peat Institute) at first as an assistant, later as a professor. At the same time he was a collaborator of the Laboratoriya khimii uglia (Laboratory for Carbon Chemistry) (1928 - 1932) and of the Institut azota (Nitrogen Institute) (1932 - 1936). During that time he worked in the fields of peat chemistry, chemistry of

Card 1/4

L. I. Kashtanov (Obituary)

SOV/76-32-12-32/32

the coals of the Moscow basin, natural gas, structure and hydrogenation of Boghead coal, nitrogenous bases in the generator tar of peat, drying of peat, carboxylic acids in peat. He was one of the first scientists to take up the study of methane cracking. From 1936 onwards he investigated the combustion process of the coal of the Moscow region, which is rich in sulfur, and the utilization of sulfur dioxide. In 1942 he wrote his doctor's treatise on the elimination of sulfur dioxide from the flue gases of Moscow coals rich in sulfur and the production of commercial sulfuric acid. (Ochistka topochnykh gazov mnogoseristykh podmoskovnykh ugley ot sernistogo angidrida s polucheniym tovarnoy sernoy kisloty). From 1938 onwards Kashtanov was professor of chemistry at the Moskovskiy institut khimicheskogo mashinostroyeniya (Moscow Institute for Chemical Machine Building) and specialized in the field of metal corrosion in fused salt baths. From 1942 to 1944 he organised for the VKVSh (All-Union Committee for University Training) the universities of the Mongolian People's Republic and obtained a professorship for chemistry at the Mongol'skiy universitet (Mongolian University). Between 1944 and 1956 he was professor

Card 2/4

L. I. Kashtanov (Obituary)

SOV/76-32-12-32/32

of chemistry at the Moskovskiy inzhenerno-ekonomicheskii institut imeni S. Ordzhonikidze (Moscow Institute for Engineering Economy imeni S. Ordzhonikidze) and from 1956 onwards professor of chemistry at the Vsesoyuznyy zaachnyy mashinostroitel'nyy institut (All-Union Correspondence Institute of Machine Building). He studied oxidation-reduction processes especially the protective effect of some inhibitors. He also dealt with the chemical restoration of ancient Egyptian limestone and with the analysis of ancient Slavic, ancient Siberian and Scythian bronzes. He was the author of about 90 scientific publications. As far as his organizational activities are concerned, he worked as deputy director of the Peat Institute and of the Institute of Chemical Machinery Building, deputy rector of the Mongolian University and head of the university department of the VKVSh. He was awarded the orden trudovogo krasnogo znameni (Order of the Red Workers' Banner) and medals of the Soviet Union. At the time of his death he was carrying out new investigations on oxidation.

Card 3/4

LEVANT, Grigoriy Yefimovich; RAYTSYN, Genrikh Aleksandrovich; NIKOLAYEV,
L.A., prof., retsenezent; PUTILOVA, I.N., red.; PAVLOVA, N.N.,
red.; GRIGORCHUK, L.A., tekhn. red.

[Laboratory work in general chemistry] Praktikum po obshchei khi-
mii. Pod red. I.N. Putilovoi. Moskva, Gos. izd-vo "Vysshaya shkola,"
1961. 277 p. (MIRA 15:1)

(Chemistry—Laboratory manuals)

LEVANT, G.Ye.;

[Corrosion and the protection of metals; a manual for students of machinery manufacture] Korroziia i zashchita metallov; uchebnoe posobie dlia studentov mashinostroitel'nykh spetsial'nostei. Moskva, No.1. 1962. 77 p.
(MIRA 17:2)

1. Moscow. Vsesoyuznyy zaochnyy mashinostroitel'nyy institut. Kafedra obshchey khimii.

LEVANT, Grigoriy Yefimovich; RAYTSYN, Genrikh Aleksandrovich;
ALAVENDOV, Ya.G., red.

[Laboratory work in general chemistry] Praktikum po
obshchei khimii. Izd.2., isp. i dop. Pod red. I.I.
Putilovoi. Moskva, Vysshaia shkola, 1963. 270 p.
(MIRA 17:6)

PUTILOVA, Iya Nikolayevna; LEVANT, Grigoriy Yefimovich; RAYTSYN,
Genrikh Aleksandrovich; MENKOVSKIY, Mikhail Abramovich;
KROTOV, Ivan Vasil'yevich; LOSEV, Boris Ivanovich;
STUKOVNIN, N.D., red.

[Course in general chemistry] Kurs obshchei khimii. [By]
I.N.Iutilova i dr. Moskva, Vysshaya shkola, 1964. 444 p.
(MIRA 18:1)

LEWANT, B. V., Engineer

Eng. Sci.

Dissertation: "Finished quality of the surface defined by turning in respect to the cutting conditions, geometry and wear of the tool."

21 Jun 49

Moscow Automotive Mechanics Inst.

SO Vecheryaya Moskva
Sum 71

S LEVANT, Kh-V

Machining & Machinability

Influence of Tool Wear on the Microgeometry of the Surface.
P. P. Grubov and Kh. V. Levant. (*Stanki i Instrument.*
1950, No. 4, 17-18). [In Russian]. In the investigation
described, surfaces of gray cast iron and steel were machined
at various speeds but under otherwise constant conditions
until complete failure of the cutting tool occurred, the quality
of the surface being determined at various stages of machining.
For the cast iron, surface quality deteriorated continuously
with increasing tool wear and with increasing speed of cutting
at a given stage of tool usage. For the steel, surface quality
at first improved with tool wear, then deteriorated, and finally
improved again. s. k.

LEVANT, L.

A club in every district. Za rul. 18 no.1:2-3 Ja '60.
(MIRA 13:5)

1. Predsedatel' seksii morskoy podgotovki i sporta pri gorkome
Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu,
Leningrad.

(Leningrad---Motorboat racing)

LEVANT, S.

Work has become easier. Okhr.truda i sots.strakh. no.9:58
S '59. (MIRA 13:1)

1. Sekretar' partorganizatsii Minskogo tolevogo zavoda.
(Minsk--Roofing--Hygienic aspects)

LEVANT, S.A.

On the development of laundering establishments in the city of Moscow.
Gor.khos.Mosk. 25 no.9:24-27 S '51. (MLRA 6:11)
(Moscow--Laundries, Public) (Laundries, Public--Moscow)

BUKHARIN, G.Y., inzh. po tekhnike bezopasnosti; KHARCHENKO, P., inzh.
po tekhnike bezopasnosti; TEREKHOV, V., gornyy tekhnik;
KOVALENKO, N., inzh. po tekhnike bezopasnosti; LEVANT,
Ye.Ye.; MANAKOV, V.M., inzh.-elektrotekhnik

Reader's letters. Bezop.truda v prom. 4 no.9:34 S '60.
(MIRA 13:9)

1. Trest Krasnodarnefterazvedka (for Bukharin). 2. Shakhta
No.47 tresta Kadiyevugol' (for Terekhov). 3. Trest Tatnefte-
razvedka (for Kovalenko). 4. Glavnyy mekhanik upravleniya
Severo-Zapadnogo okruga Gosgortekhnadzora RSFSR (for Levant).
5. Shakhta No.33-bis, g. Snezhnoye, Stalinskoy obl. (for
Manakov).

(Industrial safety)

LEVANTIN, B.P., inzh.

"Operation and repair of ventilation units in machinery plants"
by I.S.Khazanov, V.V.Kucheruk, P.P.Belianskii. Reviewed by B.P.Levantin.
Vest.mashinostr. 43 no.3:87 Mr '63. (MIRA 16:3)
(Factories—Heating and ventilation) (Khazanov, I.S.) (Kucheruk, V.V.)
(Belianskii, P.P.)

LEVANTIN, D. L.

Cattle Breeding

Raising meat animal production by means of controlled crossbreeding. Sov. zootekh.
8, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

LEVANTIN, D.L.

7-2

USSR/Farm Animals - Cattle.

Abs Jour : Russ Jour - Biol. 40:1, 1957, 8'63

Author : Levanina, D.L.

Inst : Institute of Animal Husbandry, AS USSR

Title : Changes in the Skeleton of Cattle with Age.

Orig Pub : Tr. In-a morfol zhivotnykh. N SSSR, 1957, vyp. 22, 68-107.

Abstract : It was established that under normal feeding conditions the skeleton of a newborn calf accounts for 24.4% of its total weight, of one and a half years old castrated bull calf - 11.3%, and of an adult bull - 10.4%. Upon crossing of Hereford with Simmental, the analogous skeleton weight of skeleton to total weight had the following values for the hybrid offspring: at birth, 22%; at an age of 8 months, 11.8%; 12 months, 12.6%; and 20 months,

Card 1/2

Card 2/2

LEVANTIN, David I. Ivarovich

[Ways of increasing beef production] Puti uvelichenia proizvodstva
goviadiny. Moskva, Gos. izd-vo selkhoz lit-ry, 1958. 70 p.
(Beef cattle) (MIRA 12:1)

LOBANOV, P.P., BRZHNEV, D.D., ROSTOVTSSEV, N.F., POPOV, I.S., NIKOLAYEV,
A.I., SMETNEV, S.I., BURLAKOV, N.M., ARZUMANYAN, Ye.A., BARYSHNIKOV,
P.A., BELYAYEV, N.M., BLOMKVIST, W.S., BORISENKO, Ye.Ye., BURDELEV,
T.P., BYCHKOV, N.P., VSYAKIKH, A.S., DAVIDOV, R.B., KUDRYAVTSEV,
P.N., KUSHNER, Kh.P., LEVANTIN, D.L., NOVIKOV, Ye.A., OZEROV, A.V.,
STARTSEV, D.I., SUKHANOV, N.P., SHVABE, A.K., YURMALIAT,
A.P., [Jurmaliets, A.P.].

In memory of Academician Efim Fedotovich Liskun. Zhivotnovodstvo 20
no. 7:84-85 J1 '58.

(Liskun, Efim Fedotovich, 1873-1958)

LEVANTIN, D.,^L kand.sel'skokhozyaystvennykh nauk; FLEGONTOV, A.,
sputnik

Only well-fed cattle. Nauka i pered.op.v sel'khoz. 9 no.9:
19-20 S '59. (MIRA 13:2)

1. Sovkhoz "Kommunarka" Moskovskoy oblasti (for Flegontov).
(Cattle--Feeding and feeding stuffs)

LEVANTIN, D.L., kand.sel'skokhozyaystvennykh nauk

Increasing the production of meat by crossbreeding. Zhivotnovod-
stvo 21 no.6:47-51 Ja '59. (MIRA 12:8)
(Esuf cattle breeding)

LEVANTIN, D.L., kand.sel'skokhoz.nauk

Interesting and useful book ("The Santa Gertrudis new beef
cattle breed" by V.V.Matskevich. Reviewed by D.L.Levantin).
Zhivotnovodstvo 21 no.10:94-95 0 '59. (MIRA 13:2)
(Santa Gertrudis cattle) (Matskevich, V.V.)

LEVANTIN, D.L., kand.sel'skokhozyaystvennykh nauk

Early maturing as a factor in intensive raising of young cattle.
Zhivotnovodstvo 22 no.7:46-54 '60. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva.

(Beef cattle)

LEVANTIN, M.L.

Preparation for fall and winter construction work of
compressor stations. Stroi. truboprov. 8 no.9:4 S '63.
(MIRA 16:11)

1. Trest No. 1, Lyubertsy Moskovskoy obl.

LE VAPU 1111, 1111
PLESSEYN, B.; SHRENTSIS, A. pri uchastii: BAYAR, O.; BUKHAROV, A.;
KOREN'KOV, V.; LEVANTIN, N.; MAKOTINSKIY, M.; ROZANOV, N.; KHAZANOV, D.
FRIDBERG, G.V., red. izd-va; TOKER, A.M., tekhn. red.

[Problems of unification and a unified catalog of construction
elements for apartment houses and public buildings; a report]
Voprosy unifikatsii i edinyi katalog stroitel'nykh izdelii dlia
zhilishchnogo i kul'turno-bytovogo stroitel'stva; soobshchenie...
[Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekt., 1955] 24 p.
[Bound with Voronkov, A. Industrializatsiia otdelochnykh rabot.
Moskva, 1955] (MIRA 11:6)

(Building) (Standards, Engineering)

OZHIGANOV, V.S.; LEVANTO, M.A.; KOROLEVA, V.A.; Primali uchastiye:
KOZLOVSKIY, N.I.; ABOIMOV, P.S.; STARTSEVA, G.B.; KRIVONOSOVA, R.B.;
SHERSTYUK, M.I.; KONOVALOVA, T.S.; ZHABOTINSKIY, I.M.; RADIN, P.A.

Improving the technology of producing electrical steel. Stal'
22 no.4:343-346 Ap '62. (MIRA 15:5)

1. Verkh-Isetskiy metallurgicheskiy zavod.
(Steel--Electric properties)

KHOLODOV, A.I.; DOKSHITSKAYA, A.I.; STARTSEVA, G.B.; LEVANTO, M.A.

Some indices of technological conditions for the manufacture of
transformer steel in electric arc furnaces. Trudy Ural. politekh.
inst. no.116:102-109 '61. (MIRA 16:6)
(Steel—Electrometallurgy)

DOKSHITSKAYA, A.I.; OZHIGANOV, V.S.; STARTSEVA, G.B.; LEVANTO, M.A.

Using type AlCaSi complex alloys in the manufacture of transformer
steel in electric furnaces. Trudy Ural. politekh. inst. no.116:
89-101 '61. (MIRA 16:6)

(Steel--Electrometallurgy)

LEVANTOVICH, I. A.

✓ Increasing the output of the column in preliminary
benzene fractionation. I. A. Levantovich and A. A.
Gorikov (Coke Chem. Plant, Sverdlovsk). *Khim. i
Tekhn. 1986, No. 7, 63-4. Some improving measures
are described and data presented.* W. Per.

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E071/E435

5.3300

AUTHORS: Privalov, V.Ye., Cherkasov, N.Kh., Levantovich, I.V.
Yaroslavskaya, T.A.

TITLE: The production of sulphur free benzole from pure
benzole by chemical purification methods

PERIODICAL: Koks i khimiya, no.3, 1962, 42-44

TEXT: An investigation of the possibility of production of
sulphur free benzole suitable for the manufacture of cyclohexane
from pure benzole by chemical purification methods is described.
On the assumption that the removal of thiophene from pure benzole
under industrial conditions is sufficiently developed, the authors
concentrated on the removal of other sulphurous compounds. The
determination of small quantities of carbon disulphide was based
on the reaction of carbon disulphide with secondary amines in the
presence of copper salts with the formation of copper
dithiocarbamate - a brown compound, well soluble in benzene.
In the first instance the removal of carbon disulphide was
attempted by washing of pure benzene with industrially available
amines with additions of a number of other reagents: formaline
Card 1/3

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E071/E435

The production of sulphur free

with ammonium sulphate and ammonia. monomethylolurea in acid and alkali medium, dimethylolurea in acid and alkali medium formaline with calcium chloride, formaline with calcex formaline with lime, formaline with aniline, formaline in alkali and acid medium. On the whole the experiments were unsuccessful, in some cases a complete removal of thiophene and a decrease in carbon disulphide was obtained. The latter was ascribed to the presence of methyl alcohol in formaline. This was confirmed by washing pure benzene with alcoholic solutions of alkali which produced benzene either free or containing not more than 0.0001% of carbon disulphide. The optimal consumption of methanol solution of alkali was 6 to 8%. {Abstractor's note: Concentration of alkali not given} Thiophene is not removed under these conditions. Its removal was achieved by washing with 15% of steam with an addition of 1% of formaline. On the basis of the above results the following procedure was tested on an industrial scale. Starting material: benzene sp. gr. 0.877 drop point 79.8°C. 95% evaporated at 83°C. colour 0.35 bromine number 0.06 total sulphur 0.02% carbon disulphide 0.0069% crystallization

Card 2/3

The production of sulphur free

S/068/62/000/003/001/003
E071/E435

temperature $+4.7^{\circ}\text{C}$. Washings: preliminary wash with 1% of oleum for 10 min, wash with 16% of oleum for 9 hours two water washes (total consumption of water 7%, time 5 min each) preliminary wash with methanol solution of alkali (0.3% 10 min) wash with methanol alkali (3.3%, 6 hours) two water washes (total consumption 6%, 5 min each). Washed benzole was reitified on a column with 34 plates. The product obtained was free from thiophene and carbon disulphide, sp.gr. 0.87, drop point 79.8°C 95% at 80.4°C , crystallization temperature -5.5°C . The yield of sulphur free benzene was about 90%.

ASSOCIATIONS: VUKHIN (V.Ye.Privalov)
NTMK (the remaining authors)

Card 3/3

LEVANTOVICH, Yu.I.

Regulations of the idle time of local cars in the classification yards are obsolete. Zhel. dor. transp. 41 no.10:72-73 0 '59.
(MIRA 13:2)

1.Glavnyy inzhener stantsii Chelyabinsk.
(Chelyabinsk--Railroads--Freight)

LEVANTOVICH, Yu.I.

Operative planning of the classification work in a station. Zhel.
dor.transp. 46 no.6:70-72 Jo '64. (MIRA 18:1)

1. Glavnyy inzh. stantsii Chelyabinsk.

LEVANTOVSKAYA, I.I.

TSIKLIS, Daniil Semenovich; LEVANTOVSKAYA, I.I., red.; LUR'YE, M.S.,
tekhn.red.

[Technology of physicochemical high pressure research] Tekhnika
fiziko-khimicheskikh issledovanii pri vysokikh davleniakh. Izd.
2-oe, perer. i dop. Moskva, Gos. nauchno-tekhn.izd-vo khim. lit-ry,
1958. 301 p. (MIRA 11:4)
(Compressibility)

GOLUBENKOVA, L.I.; KOVARSKAYA, B.M.; LEVANTOVSKAYA, I.I.; AKUTIN, M.S.

Mechanism of the hardening of epoxy resins with amines. Vysokom.
soed. 1 no.1:103-109 Ja '59. (MIRA 12:9)

1. Nauchno-issledovatel'skiy i proyektnyy institut plasticheskikh
mass.

(Resins, Synthetic) (Amines)

KOVARSKAYA, B.M.; GOLUBENKOVA, L.I.; AKUTIN, M.S.; LEVANTOVSKAYA, I.I.

Preparation of some block polymers and investigation of their properties.
Vysokom.sosed. 1 no.7:1042-1047 J1 '59. (MIRA 12:11)

1. Nauchno-issledovatel'skiy institut plasticheskikh mass.
(Polymers)

NEYMAN, M.B.; GOLUBENKOVA, L.I.; KOVARSKAYA, B.M.; STRIZHKOVA, A.S.;
LEVANTOVSKAYA, I.I.; AKUPIN, M.S.; MOISEYEV, V.D.

Thermal degradation of condensation resins. Part 1: Thermal
degradation of epoxide resins. Vysokom.sped. 1 no.10:
1531-1537 0 '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut plastmass, Moskva.
(Resins, Synthetic)

PHASE I BOOK EXPLOITATION

507/9934

International symposium on macromolecular chemistry. Moscow, 1960.

Reshchennorodnyy simposium po makromolekulyarnoy khimii SSSR. Moskva, 14-18 iyunya 1960 g.; doklady i soobshcheniya. Sektorya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Rech. Ed.: P. S. Kabanov.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

Butyev, V. M., A. E. Plyudnikov, and S. S. Nedel'ev (USSR). The Effect of Formic Acid and Formates on the Oxidation of Hydrocarbons and Hydrocarbon Polymers	364
Kozlov, V. Y., and D. M. Yankovskiy (USSR). Study of the Effect of Some Organic and Organometallic Compounds on the Thermal Degradation of Polyvinyl Chloride	372
Makarelo, O., E. Shtetler, and P. Kafelin (Czechoslovakia). Degradation of Poly-ε-Caprolactam as a Result of Exchange Reaction Between Amide Bonds	380
Rucka, M., J. Hlavkov, and M. Fialova (Czechoslovakia). Neutralization of Residual Catalyst in Polydimethylsiloxane: Effect of Thermal Neutralization on the Thermal Stability of the Polymer	388
Osler, J., O. Malmgren, and L. Sjogren (Czechoslovakia). Thermooxidation: Degradation of Polyesters. Study of Degradation Reactions for Different Types of Linear Polyesters	405
Kurayev, M. B., D. M. Karasikova, L. I. Golubenkova, A. S. Litvinova, and A. V. Lavantovsky, and V. A. Avtulin (USSR). On the Degradation and Stabilization of Some Polymeric Materials	414
Antoni, J. G., and A. S. Kurayevskiy (USSR). Investigation of the Efficiency of Inhibitors of Rubber Oxidation at Various Temperatures	423
Gratchikov, A. V., and V. A. Kargin (USSR). Mechanism of the Protective Action of Benzene Rings During the Radiation Lysis of Polystyrene	433
Radman, A. A., and E. A. Andrianov (USSR). On the Hydrolytic Stability of Side Groups in Polymers with Inorganic Chains of Molecules	440
Brilkh, A. A., Ye. A. Pessaya, and G. I. Volkov (USSR). Mechanicochemical Trifluorations and Block Copolymerization During the Freezing of Starch Solutions	440
Usmanov, Kh. M., B. I. Aybekshayev, and T. Azizov (USSR). Modification of the Properties of Cellulose by Grafting	444

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S/191/60/000/007/005/015
B004/B056

AUTHORS: Neyman, M. B., Kovarskaya, B. M., Levantovskaya, I. I.,
Strizhkova, A. S., Akutin, M. S.

TITLE: Investigation of the Thermal Destruction of Condensate
Resins. The Thermal Destruction of Hardened Epoxy Resins 15

PERIODICAL: Plasticheskiye massy, 1960, No. 7, pp. 17 - 20

TEXT: Following an earlier paper (Ref. 1) on the thermal destruction of ED-6 (ED-6) epoxy resin, the authors give a report on their investigation of the thermal destruction of ED-15 (ED-15) epoxy resin obtained by condensation of epichlorohydrin with diphenylpropane, as well as of ED-15 and ED-6 hardened with 7% polyethylene polyamine or with 30% maleic anhydride. They give the following experimental data: Kinetics of gas formation in the thermal destruction of ED-15 (Table 1, Fig. 1) on the basis of the chromatographical analysis by means of YXT-2 (UKhT-2) or the Griffin apparatus (Fig. 2, chromatogram); kinetics of gas formation in ED-15 (Fig. 3) hardened with polyethylene polyamine and ED-15 hardened with maleic anhydride (Fig. 4); degree of decay of the hardened ED-6 as a

Card 1/2

Investigation of the Thermal Destruction of
Condensate Resins. The Thermal Destruction
of Hardened Epoxy Resins

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B004/B056

function of time at 345°C (Fig. 5) and as a function of temperature (Fig. 6), as well as an electron paramagnetic spectrum (Fig. 7) that proves the formation of free radicals. From these data the following conclusions were drawn: Unhardened and hardened epoxy resins (low-molecular ED-6 and high-molecular ED-15) decompose in the absence of oxygen above 200°C - 250°C. Liquid and gaseous products are formed, which in unhardened resin consist of distilled-off low-molecular fractions contained already in the initial resin, and in hardened resin of destruction products. The destruction products contain CO, CO₂, CH₄, C₂H₄, C₃H₈, and other hydrocarbons, as well as saturated and unsaturated aldehydes. The mechanism of the destruction of hardened resins is analogous to that of unhardened ED-6. In both cases, a radical process occurs, which begins with the separation and decay of epoxy groups. Resins hardened with maleic aldehyde form CO and CO₂ in larger quantities as a result of the decay of the maleic aldehyde. Resin hardened with polyethylene polyamine is more easily decomposed than such hardened with maleic aldehyde and forms more low-molecular products. There are 7 figures, 2 tables, and 6 references: 1 Soviet, 2 US, 2 German, and 1 Swiss.

Card 2/2

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B016/B052

15.8110

AUTHORS: Neyman, M. B., Kovarskaya, B. M., Strizhkova, A. S.,
Levantovskaya, I. I., and Akutin, M. S.

TITLE: The Mechanism of Thermal Destruction of Solidified Epoxy
Resins

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 5,
pp. 1147-1149

TEXT: The authors studied the kinetics of thermal destruction of epoxy resins solidified by maleic anhydride (see scheme) or polyethylene polyamine. They determined the forming radicals by the method of electron paramagnetic resonance. Fig. 1 schematically shows the results obtained from thermal processes: (1) gas separation; (2) weight losses of the residue; and (3) rate of radical accumulation. Considerable amounts of methane, carbon monoxide, formaldehyde, acetaldehyde, and acrolein were found in the gaseous products of destruction. According to the temperature, gas separation stops after 5 - 15 minutes. Thermal destruction, however, continues while liquid products of a comparatively low molecular weight

Card 1/4

86837

The Mechanism of Thermal Destruction of
Solidified Epoxy Resins

S/020/60/135/005/027/043
B016/B052

are distilled from the polymer. The authors suggest the following scheme for the formation of the above products: They assume that the terminal $\text{CH}_2-\text{CH}=\text{CH}_2\text{O}$ groups are separated most easily from the polymer. This radical can be isomerized into a $\text{CH}_2-\text{CH}(\text{OH})-\text{CH}=\text{O}$ radical which forms acrolein and hydroxyl. The original radical may also decompose into a CH_2O molecule and a CH_2-CH radical. By isomerization of the latter, the acetyl radical $\text{CH}_3-\dot{\text{C}}\text{O}$ may be formed which extracts hydrogen from the epoxy resin and forms acetaldehyde. Finally, the acetyl radical may decompose into CO and CH_3 . By absorbing hydrogen, CH_3 is converted into methane. In all cases, the reaction takes place under the formation of active radicals which cannot accumulate in high concentrations and, therefore, cannot be detected by the e.p.r. method. This is only possible in later stages of the process. The authors assume that the bonds of diphenylol propane which cause the formation of stable radicals, may also be ruptured. The rupture of

Card 2/4

86837

The Mechanism of Thermal Destruction of
Solidified Epoxy Resins

S/020/60/135/005/027/043
B016/B052

phenyl-hydrogen bonds probably leads to the formation of stable radicals and semiquinone structures. The singlet signals recorded by the authors indicate the presence of long-lived radicals. From these results the authors determined the activation energies of the three above-mentioned processes. For the resin solidified by maleic anhydride, they are 30, 26, and 53 kcal/mole, respectively, and for the resin solidified by polyethylene polyamine, they are 25, 35, and 44 kcal/mole. The authors also assume that processes (1) and (2) are related to the rupture of looser bonds, while process (3) is closely connected with the rupture of tight bonds. From their experiments the authors conclude that active radicals can not easily be detected by the available e.p.r. method, while this is possible in the case of weakly active radicals. They thank Z. P. Yegorova and O. L. Lependina for their assistance in taking spectra, and E. G. Gintsberg for the polarographic determination of aldehydes. L. A. Blyumenfel'd, A. V. Topchiyev, and V. V. Voyevodskiy are mentioned. There are 4 figures and 8 references: 7 Soviet and 1 British.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut
plasticheskikh mass (State Scientific Research Institute of
Plastics)

Card 3/4

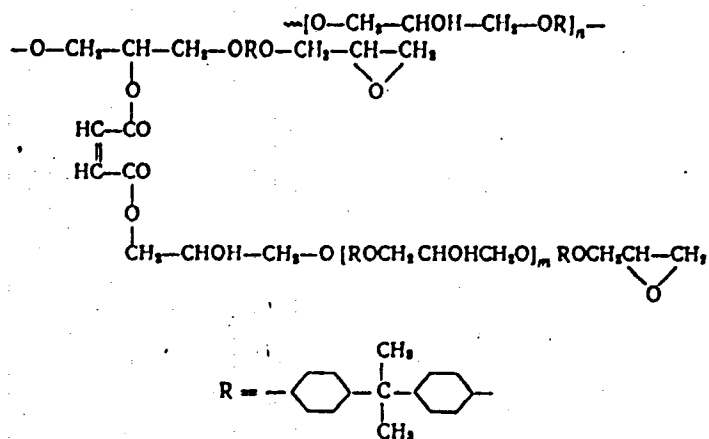
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The Mechanism of Thermal Destruction of
Solidified Epoxy Resins

S/020/60/135/005/027/043
B016/B052

PRESENTED: June 29, 1960, by V. A. Kargin, Academician

SUBMITTED: June 27, 1960



Card 4/4

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5/130/62/004/003/01 1723

3124/3101

15.2110

AUTHORS: Kovarskaya, B. M., Strizhkova, A. S., Levantovskaya, I. I.,
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TITLE: Study of the thermal degradation of condensation resins. III.
Thermal degradation of heterochain polyesters (polyarylates)

PERIODICAL: Vysokomolekulyarnye soyedineniya, v. 4, no. 5, 1962, 434-437

TEXT: Thermal degradation of polyarylates on the basis of 4,4'-dihydroxydiphenyl-2,2'-propane (DDP) and terephthalic (polyarylate TD) or isophthalic (polyarylate ID) acids prepared either in a high-boiling solvent (nitrobenzene) (TD(s) and ID(s), respectively) or by interfacial condensation (TD(i) and ID(i), respectively) is studied in this paper. The yield points of the polyarylates were: TD(s) ~ 340°C; TD(i) ~ 350°C; ID(s) ~ 360°C; ID(i) ~ 270°C. Thermal degradation of the mentioned polymers was investigated between 250 and 525°C. Evolution of gas sets in above 400°C, where 0.26-0.42 mole CO, 0.30-0.60 mole CO₂, and 0.06-0.13 CH₄ per mole of the polyarylate structural unit are liberated. The liquid products of thermal
Card 1/3

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B124/B101

Study of the thermal ...

degradation of TD(s) performed at 450°C show absorption bands at 1365, 1465, and 2970 cm^{-1} characteristic of the methyl group, and at 1735 and 1750 cm^{-1} characteristic of the ester bond. The split absorption band at 1735 cm^{-1} indicates the presence of terephthalic acid, whereas the split band at 1600 cm^{-1} shows free DDP to be present. The infrared spectrum of the solid residue of TD(s) after thermal degradation at 450°C for 1 hour does not contain bands which are characteristic of methyl groups, whereas bands characteristic of the ester bond are established in the infrared spectrum of the solid residue exposed to thermal degradation at 500°C for 1 hour. These bands are lacking in the spectrum of the product exposed to thermal degradation at 600°C for 20 minutes. Absorption spectra of the solid residue of TD(s) and DDP in the region of 700 - 900 and 1600 cm^{-1} show that the concentration of phenyl rings increases after degradation leading to the formation of polyphenylene-like structures. These conclusions were confirmed by the EMR spectra of the residues of thermal degradation of TD(s) at 450, 500, and 600°C. A. A. Berlin and L. A. Blyumenfeld Vysokomolek. soyed., 2, 1494, 1960; Zhurnal strukturnoy khimii 1, 103,

Card 2/3

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B101/B186

15 9200
15 8320

AUTHORS: Meyman, M. B., Kovarskaya, B. M., Levantovskaya, I. I., Dral-
yak, G. V., Izvikova, M. P., Sidorov, V. A., Kochetkov, V. N.,
Tressman, G. L., Tatevos'yan, G. O., Kuznetsov, I. B.

TITLE: Stabilization of polyamide films for agriculture

PERIODICAL: Plasticheskiye massy, no. 10, 1962, 6 - 8

TEXT: Protection of polyamide films, type 54, as used in hothouses and
silos, from effects of photo- and thermooxidation was tested by trying
various additives under various test conditions. The following were added
as ultraviolet light absorbers: 2-hydroxy-4-methoxy-benzophenone (OMBF)
(I), 2-hydroxy-4-alkoxy-benzophenone (a mixture of benzophenones
with various alkoxy groups of the type OC_7H_{15} , OC_8H_{17} , or OC_9H_{19}) (II), and
2-hydroxy-5'-methyl-benzotriazole (Tinuvin) (III). As antioxidants, KI
and copper naphtheneate and organic stabilizers of the following type were
used: 1) derivatives of aromatic amines; 2) phenol derivatives; 3) aromatic
oxamines; 4) 2,6-ditert-butyl-4-methyl-phenyl-pyrocatechin phosphite (Ionol).
Carb 1/2

stabilization of ...

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Polyamide film blanks produced by condensation, namely hexamethylene adipate and ϵ -caprolactam at 260°C in an N-atmosphere, were subjected to thermo- and photooxidative action. Light sources were carbon-arc and mercury-quartz lamps, type HPK-2 (PRK-2). Temperature in the test chamber was $70 \pm 2^\circ\text{C}$. Thermooxidation measured by the drop in oxygen pressure was eliminated most efficiently by the pyrocatechin esters and phenyl- β -naphthyl-amine. It was found that stabilizers of the OMBF and Tuvix types act as antioxidants. Photooxidation experiments showed the following results: in most cases the elongation at rupture dropped even on initial exposure. After 200 hrs of exposure time, breaking tenacity of both stabilized and nonstabilized films fell by approximately 20 - 25%. Ageing time until embrittlement was determined. Without an inhibitor it began after 190 hrs of exposure to the light of an arc lamp. Optimum results were obtained with pyrocatechin esters (250 hrs), KI + copper naphthenate (260 hrs) and (Santovar) ((2,6-di-tert-butyl-hydroquinone)) (240 hrs). Different action of the light from the arc lamps and the mercury lamps was explained by spectrum differences. Further field tests are recommended. There are 3 figures and 1 table.

Card 2/2

KOVARSKAYA, B.M.; STRIZHKOVA, A.S.; LEVANTOVSKAYA, I.I.; SHABADASH, A.N.;
NEYMAN, M.B.; KORSHAK, V.V.; VINOGRADOVA, S.V.; VALETSKIY, P.M.

Thermal decomposition of condensation resins. Part 3: Thermal
decomposition of heterochain polyesters (polyarylates). Vysokom.
soed. 4 no.3:433-439 Mr '62. (MIRA 15:3)

1. Nauchno-issledovatel'skiy institut plastiticheskikh mass.
(Esters) (Resins, Synthetic—Thermal properties)

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8/191/63/000/003/005/022
B101/B186

15.8080

AUTHORS: Leyantovskaya, I. I., Yazvikova, M. P., Dobrokhotova, M. K.,
Kovarskaya, B. M., Vlasova, K. N.

TITLE: Thermooxidative degradation and stabilization of some poly-
amides

PERIODICAL: Plasticheskiye massy, no. 3, 1963, 19 - 23

TEXT: This is a study of the kinetics of oxidation of polycaproatamide (I),
polyamide 68 (II) (a polycondensate of the SH salt), and copolymer 548 (III)
(polycondensate of hexamethylene diamine adipate, hexamethylene diamine
sebacinate, and ϵ -caprolactam). The decrease in oxygen pressure was deter-
mined at initial $P_{O_2} = 200$ mm Hg and $130 - 200^\circ\text{C}$ or at 200°C and changing

P_{O_2} . The kinetic curves of oxidation were s-shaped especially at low
temperatures or low P_{O_2} . The induction period was 10-20 min. A slower
drop in pressure at a longer oxidation time is explained by liberation of
Card 1/2

Thermooxidative degradation ...

S/191/63/000/003/005/022
B101/B186

gaseous oxidation products proved chromatographically in (I). At 130° and P_{O_2} = 200 mm Hg, O_2 was noticeably adsorbed by I and II, the stability of I

being larger than that of II. III was oxidized more easily than I and II. The effect of the following stabilizers was tested; 0.2% KI; 0.2% copper naphthenate; 0.1% KI + 0.1% copper naphthenate; 0.5% diphenyl amine; N-iso-propyl-N'-phenyl-p-phenylene diamine; N,N'-di-sec-octyl-p-phenylene diamine; N,N'-di-sec-nonyl-p-phenylene diamine; N,N'-di- β -naphthyl-p-phenylene diamine; phenyl- β -naphthyl amine (Neozone D); N-phenyl-n'-cyclohexyl-p-phenylene diamine; α - and β -naphthol; 2,6-di-tert-butyl-4-methyl phenol (ionol); 2,2-methylene-bis-(4-methyl-6-tert-butyl)-phenol (2246) propyl gallate; phenol styrene condensation product; mercaptobenzimidazole; tri-nonyl triphenylene phosphite; and polyphosphites as well as the photo-stabilizers 2-hydroxy-4-methoxy-benzophenone and 2,2'-hydroxy-5'-methyl-phenyl benzo triazole. Results: Aromatic amines were more effective than phenols and naphthols. N,N'-di- β -naphthyl-p-phenylene diamine was most active for I and II; Neozone D, however, for II. The mixture containing 0.1% KI and 0.1% copper naphthenate had a strong protective effect in I and II. There are 9 figures.

Card 2/2

NEYMAN, M.B.; KOVARSKAYA, B.M.; LEVANTOVSKAYA, I.I.; DRALYUK, G.V.;
YAZVIKOVA, M.P.; SIDOROV, V.A.; KOCHETKOV, V.N.;
TROSSMAN, G.M.; TATEVCS'YAN, G.O.; KUZNETSOVA, I.B.

Stabilization of polyamide films for agriculture.
Plast.massy no.10:6-8 '62. (MIRA 15:11)
(Polyamides) (Plastic films)

LEVANTOVSKAYA, I.I.; YAZVIKOVA, M.P.; DOBROKHOTOVA, M.K.;
KOVARSKAYA, B.M.; VLASOVA, K.N.

Thermal oxidative degradation and stabilization of some
polyamides. Plast. massy no.3:19-23 '63. (MIRA 1964)

(Polyamides) (Oxidation)

KARGIN, V.A., akademik; NEYMAN, M.B., prof.; BUCHACHENKO, A.L.,
kand. khim. nauk; MIKHAYLOV, V.V.; MASLOVA, I.P.;
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KOVARSKAYA, B.M., kand. khim. nauk; ANDRIANOV, K.A., prof.;
KUZ'MINSKIY, A.S., prof.; SLONIMSKIY, G.L., prof.; MAKUNI,
Ye.B., tekhn. red.

[Aging and stabilization of polymers] Starenie i stabilizatsiya polimerov. Moskva, Izd-vo "Nauka," 1964. 330 p.
(MIRA 17:3)

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